NOV 2 4 1993

Mr. John Middelkoop, P.E.
Chief, Bureau of Eastern Hazardous
Waste Programs
Division of Hazardous Substances Regulation
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233-7251

Re: Naval Weapons Industrial Reserve Plant (Grumman)
Resource Conservation and Recovery Act
EPA I.D. No.: NYD002047967

Dear Mr. Middelkoop:

Enclosed are the EPA Region II comments on the Feasibility Study Report for the Naval Weapons Industrial Reserve Plant (Grumman), located in Bethpage, New York. These comments pertain to areas identified in the EPA HSWA permit and the NYSDEC Part 373 permit, issued in March 1992. The areas addressed under this FS are as follows: Former Drum Marshalling Area; Recharge Basin Area; Salvage Storage Area; HN-24 area; Plant No. 3; Northern Warehouses-Drum Marshalling Area; and the Off-Site Residential Neighborhood.

The enclosed set of comments includes comments from the EPA Region II RCRA and CERCLA programs. The CERCLA program has expressed concern that there needs to be consistency between the proposed corrective measures for this facility, and those for the Hooker-Ruco superfund site which is surrounded by this facility. Past practices by the Navy, Grumman, and Hooker-Ruco, have allegedly contributed to off-site groundwater contamination. General Comment #1b, and Specific Comments #1, and #7 pertain directly to the Hooker-Ruco site. Please contact us regarding these concerns and notify the NYSDEC Division of Hazardous Waste Remediation of this issue.

If the attached comments are acceptable to you, please ensure that they are transmitted promptly to the Permittee along with any comments which you may have.

If there should be any questions regarding the enclosed comments, Ms. Carol Stein, of my staff, can be contacted at (212) 264-5130.

Sincerely yours,

Andrew Bellina, P.E.
Chief, Hazardous Waste Facilities Branch

Enclosure

cc: Dennis Lucia, NYSDEC w/encl.
Kelly Bologna, NYSDEC w/encl.
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Enclosure

U.S. Environmental Protection Agency

Comments on the
Naval Weapons Industrial Reserve Plant (NWIRP) / Grumman-Bethpage
Feasibility Study

A. GENERAL COMMENTS

1. Interim vs. Final Action for Site - The Draft FS appears to present a unified, comprehensive remedial strategy for all of the contamination attributable to the NWIRP. EPA does not want to slow any actions to be taken by the Navy, but cannot necessarily consider the proposed actions as the "final" actions for the site, for the following reasons. This probably should not be addressed in the FS, but rather in the proposed plan and ROD.

a. Please note that the Hazardous and Solid Waste Amendments to RCRA define the Grumman/NWIRP properties as one facility, with corrective action required for the entire facility. In addition, according to CERCLA, the definition of site includes any area off of a property where contamination has become located. The Navy's investigation has only looked at Navy property. Maps delineating the extent of soil contamination at the NWIRP terminate at the fenceline suggesting that contamination is limited to the fenced-in areas of the site. While the Navy and Grumman may have an arrangement relating to responsibility for cleanup, EPA cannot consider the site as defined by CERCLA or the facility as defined by RCRA to be addressed by the proposed actions. Further, EPA needs to ensure that actions taken at the Grumman property and the NWIRP property are consistent. Thus, the FS must indicate how soil contamination beyond the fencelines is to be addressed and through what mechanisms.

b. It was EPA's understanding in several conference calls and meetings with the NYSDEC that each of the sites in the area (Grumman, Navy and Hooker/Ruco) would address the contamination on the respective properties through source control measures, and then address the downgradient groundwater contamination through cooperative and unified efforts of all parties. The Navy's "preferred alternative" for groundwater is not consistent with EPA and NYSDEC's agreed approach to addressing groundwater contamination through unified efforts at the three sites. If the Navy wishes to pursue "off-site", downgradient remedial actions for groundwater the EPA would not object. However, any action the Navy may take in that respect shall not exempt them from potential future remedial measures that may result pursuant to the EPA and NYSDEC's combined groundwater RI/FS activities.

2. Remedial Action Objectives.

a. The Navy has proposed remedial action objectives and goals in Section 2 of the FS. However, the preferred alternative does not fully meet the goals and objectives. The Navy proposes to actively treat the most contaminated soil and groundwater, but does not explain how the residual contaminants will be managed. The proposed groundwater cleanup level of 100 ppb will not ensure that the cleanup standards are met. If the Navy is going to rely on natural attenuation and capture by the Bethpage Water District wells it must provide some analysis of when the groundwater under the site will attain the remedial action goals. Further, the Navy proposes that the soil contaminants will be addressed by a combination of treatment and containment. But, the Navy has not assessed the impact to groundwater from leaving volatiles in soil at the proposed level.

b. Any proposed soil remedy for the site should be able to provide adequate protection to the groundwater to prevent further groundwater contamination. This is an essential step in providing source control measures for the contaminated soils and groundwater at the Site. It is not clear whether the proposed soil remedial action goals have fully addressed this concern. At other sites NYSDEC TAGM levels have been used to establish the soil standards.

3. Characterization of the Site.

a. Review of the Navy's Phase I and II RI Reports and Draft FS, does not reveal the results of any sampling and analysis for Tentatively Identified Compounds (TICs). It has been EPA's experience that NYSDEC considers TIC sampling and analysis to be essential at other sites prior to the ROD. The Navy should discuss this issue as it relates to full site characterization.

b. It appears that the soils in and below the recharge basins (sumps) are not being addressed as part of a remedial action at the NWIRP. These recharge basins have been documented to have received wastes from production processes at the NWIRP and, as the RI indicates, are likely sources of groundwater contamination. Despite this fact, these sumps have not been targeted for remediation. Even if Grumman has routinely removed sediment form the recharge basins, underlying soils may present a continued source of groundwater contamination and, must therefore be addressed.

c. The Navy's RI and FS Reports mention the potential presence of DNAPLs in the groundwater beneath the facility, however, none of the groundwater measures presented in the preferred alternative include actions to deal with DNAPLs. If DNAPLs are present at this Site, specific and separate measures may be required to address the problem. DNAPLs in

groundwater generally do not respond to standard pump and treat methods. DNAPLs may move independent of groundwater flow making them difficult to locate and remediate. The DNAPL issue needs to be addressed further in the FS.

4. The FS should not be too specific about design details that may need to be modified. If details are presented appropriate caveats should be included such as "the following system is believed to meet the performance standards".

5. The Navy's preferred alternative calls for the use of deed restrictions to limit future use of the site. At other sites EPA and NYSDEC have not favored deed restrictions because of the difficulties in controlling future development and enforcing institutional controls. The FS should provide additional discussion as to why deed restrictions are more feasible on Federally owned property and on the Navy's obligations under CERFA should the land change ownership.

6. EPA does not believe that sufficient information is presented in the FS to properly evaluate the groundwater alternatives the Navy is presenting. More information, particularly regarding capture zones of proposed pumping wells, needs to be included in the FS. EPA is not confident that the Navy's proposal will effectively prevent further downgradient migration of contaminated groundwater from leaving it's facility.

7. Some additional characterization of the soil may be necessary during design or remedy construction to more accurately delineate the extent of contamination.

8. Due to the extensive time required to remediate contaminated groundwater, the Navy should consider interim measures to contain the contamination, in addition to the final measures which it proposes in the FS.

B. SPECIFIC COMMENTS

1. Section 1.4.3

a. pg. 1-7, ¶ 7 - Please note that the recharge basins (sumps) at the Hooker/Ruco site are **not** currently used for industrial purposes. Sump 3 at the Hooker/Ruco site is used for storm water recharge while sump 4 is used for boiler blowdown only. None of the existing recharge basins have been used for the discharge of process wastewaters since the 1970s. Please revise this paragraph of the FS to address this comment.

b. pg. 1-8, ¶ 2 - It is unlikely that the recharge basins at the Hooker/Ruco site are responsible for creating a mounding effect in the groundwater due to the low volume of water these sumps receive.

2. Section 1.5.3, pg. 1-11, ¶ 2 - The FS does not present sufficient information to make the statement that "..all contaminated groundwater from Site 1 would be captured by Grumman Production wells to the south." The extent of the groundwater contamination beneath the NWIRP has not been fully delineated, nor can the groundwater contamination from Site 1 be distinguished from the groundwater contamination in other areas of the facility. The FS only presents the results of some particle tracking modeling efforts. The capture zones or the effective depths of Grumman's pumping wells are not presented. The particle tracking has only presented paths from an aerial perspective and not in a vertical depth perspective. The possibility exists that contaminant particle paths may flow beneath the effective pumping zones created by the Grumman wells.

The statement made in this paragraph also relies on the current pumping conditions of the Grumman wells. These wells are documented to have varied in their pumping rates seasonally and over time. Thus, any claims made based on the result of modeling using current pumping conditions, should be qualified accordingly.

3. Section 1.6.2 - See General Comment 3.b pertaining to the sampling of soils beneath the recharge basins.

4. Section 2.2.1, pg. 2-2, ¶ 1 - The conclusion that the recharge basins pose negligible risk is not supported. The conditions of any SPDES permits and their relation to the remedial activities at the NWIRP should be presented in order to properly evaluate the effectiveness of the overall remedial strategy to be employed at the site. All conditions and cleanup goals required by the SPDES permit should be presented.

5. Table 2-1 - Footnote (d) is incorrect. The risks were recalculated as a result of the Phase 2 RI.

6. Table 2-9 - See General Comment 2 concerning the use of NYSDEC's TAGM.

7. Table 2-11 - The New York State Groundwater Effluent Standards presented in this Table appear to contradict information supplied to the EPA by NYSDEC for similar discharges at the Hooker/Ruco site. NYSDEC has indicated to EPA that the NYSDOH Drinking Water Standards were applicable to discharges that would impact the sole source aquifer. These standards have been applied at the Hooker/Ruco site as ARARs for discharge of treated water. The presentation of the effluent standards in the Navy's FS appears to contradict NYSDEC's policies on discharges to a sole source aquifer. If the NYSDOH standards are not employed, the discrepancy in NYSDEC policy would require further explanation.

8. Table 2-12 - The remedial action goals for soil are not clear from this table. Is it the lowest among the risk based, ARAR

based or TBC based? Since this table is establishing the cleanup standards for soil, the standard to be used must be clear. Further, the footnotes for the ARAR based and TBC based remediation goals are not clear. This table shall clearly reference all sources including titles of all documents from which information was obtained.

9. Figures 2-1 through 2-6 - These figures indicate that the extent of soil contamination terminates at the fencelines. As discussed in #1.a. of the General Comments, the FS must indicate how soil contamination beyond the fencelines is to be addressed and through what mechanisms.

10. Figure 2-7 - The estimated extent of groundwater contamination portrayed on this figure has unlikely boundaries given the data that is available.

11. Section 3.3.3, page 3-5 - Clay capping as a containment response action would preclude future residential use and would require land use restrictions. Therefore, alternative S2B would not be suitable for future residential use.

12. Sections 3.3.5 and 3.3.6 (Alternatives S4A and S4B)- Other alternatives described in this report use "A" and "B" to differentiate between projected land use. Please renumber these as two separate alternatives in accordance with projected land use..

13. page 3-11, ¶ 4 - The Navy is proposing "modified action levels" as part of its preferred alternative. In addition to concerns raised above regarding the soil trigger levels, the proposal for three times the VOC action levels is not supported. Does the Navy consider this the "principal threat" as discussed in the NCP. Is the modified action level correlated in any way with the performance capabilities of the in-situ vapor extraction system. Or is there another basis for this proposal?

14. Section 3.4.5, Alternative GW4A

a. One of the stated remedial action objectives is to restore the groundwater to the remedial action goals throughout the plume. If this cannot be achieved, the stated objective is to prevent further off-site migration of contaminants. This proposed alternative (the preferred alternative) will not meet either of these objectives.

b. This alternative is proposing to use an aeration basin being introduced by Grumman. No discussion is provided regarding the potential for the aeration basin to become a source of groundwater contamination. Also, there is no discussion regarding the permitting requirements to use this "off-site" basin. Some consideration should be given as to whether this aeration basin might constitute a corrective action management unit (CAMU) under RCRA.

15. Section 4.2.5, Alternative S4B

a. See comment 13 above regarding the modified action levels. Also, will vapor extraction continue until the remedial action goals are attained or until the modified action levels are reached?

b. pg. 4-18, ¶ 1,2 - A more detailed explanation of the proposed use of the "hazardous waste criteria" mentioned in these paragraphs shall be provided. It is not clear from the FS exactly what this "hazardous waste criteria" is or what chemical-specific concentrations are to be achieved. Further discussion of the LDRs as they may apply to disposal in off-site landfills is required.

c. Prior to selecting either landfill disposal or incineration of PCBs, the Navy should ensure that a TSCA authorized PCB landfill or incinerator would be willing to accept the PCB contaminated soil from the facility. Currently, there are only a handfill of TSCA authorized landfills and incinerators. Depending upon the availability of authorized PCB landfills/incinerators, the Navy may be required to store the excavated soil at the NWIRP/Grumman facility pending acceptance at an appropriate PCB landfill or incinerator. This scenario should be accounted for by the Navy, and provisions should be made for safe management of the stored or stockpiled soil. Please note that authorization from EPA or NYSDEC under the CAMU rule, may be required for on-site storage of the contaminated soil.

d. Appendix E (Cost Estimates) does not take into account the costs pertaining to transporting the PCB-contaminated soil for long distances. These long transports may be necessary if capacity is not available at closer locales.

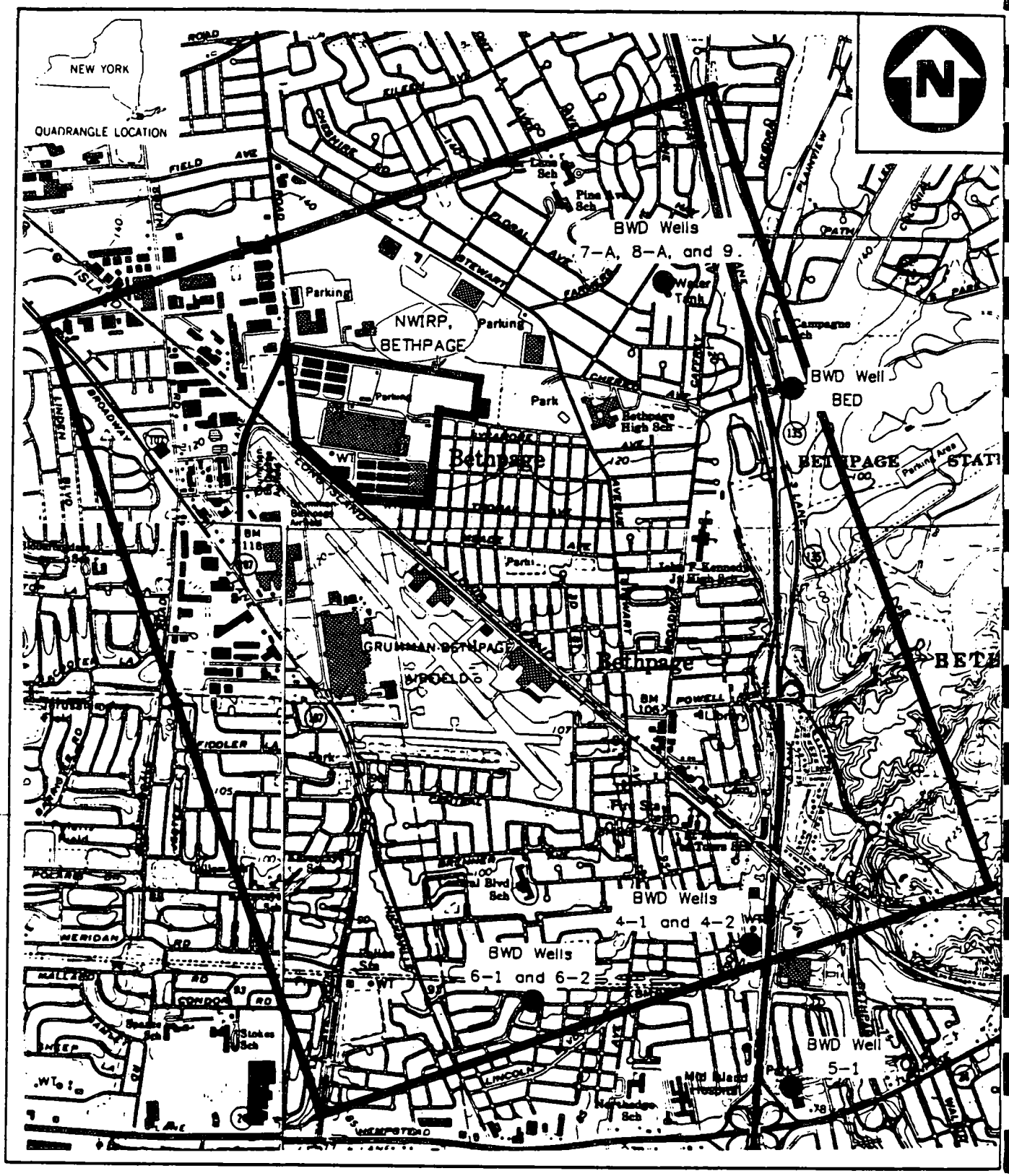

FIGURE 1-5

LOCATION OF PUBLIC WATER SUPPLY WELLS
PHASE 2 REMEDIAL INVESTIGATION/
FEASIBILITY STUDY/NWIRP
BETHPAGE, NEW YORK

HALLIBURTON NUS
Environmental Corporation